REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 1-19 are pending in this application. Claims 12-19 are added by the present response. Claims 1-11 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent 5,802,296 to Morse et al. (herein "Morse") in view of U.S. patent 5,956,028 to Matsui et al. (herein "Matsui") and further in view of U.S. patent 6,377,263 to Falacara et al. (herein "Falacara").

Addressing the above-noted rejection, that rejection is traversed by the present response.

In the Response filed October 16, 2003, applicants presented arguments to the allowability of claims 1-11 over the applied art. The Advisory Action of November 14, 2003, merely indicated that the rejections were maintained. However, applicants reiterate that claims 1-11 are believed to clearly distinguish over the applied art.

The Official Action cites Morse as disclosing all of the applicants' claim limitations with the exception of a management node at a server, or an interpretation node at each user terminal for cooperating with the management node. The Official Action cites Matsui and Falacara as disclosing these more detailed aspects of the applicants' invention and states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to arrive at the applicants' claims. Applicants respectfully traverse the rejection.

Claim 1 recites, *inter alia*, an information processing system including:

> ". . . each of the terminals provides a movement interpretation node configured to set forth parameters needed for interpretation of the movement of an associated virtual living object based upon user input and to provide the movement interpretation node to the server via the network, and
>
> wherein the server provides a management node configured to determine at least some movements for each virtual living object in the

virtual community space based on the movement interpretation node received from each terminal." (emphasis added)

The above emphasized claim features must be shown to be taught or suggested by the cited references in order to establish obviousness. In this regard, note that In re Chu, 36 U.S.P.Q. 2d 1089, 1095 (Fed. Cir. 1995) requires consideration of each limitation that provides a benefit and an explanation in terms of a prior art teaching or suggestion to maintain that such limitation would have been obvious in a § 103 sense. To this end, the Official Action relies on the following references, the disclosure and teachings of each of which are outlined below.

Morse discloses a computer system (110) for allowing users (120.x) to interact with each other via a client computer. The client computers (130) are connected to a server computer (140) via a network.[1] The computer system provides virtual objects in a virtual world for interaction with user controlled "avatars". A user controls his avatar by issuing commands at the client computer. For example, avatars interact with each other under control of a user to move, speak with other users, etc.

Matsui discloses a virtual space communications system including a data management computer (200), a host computer (100), which cooperatively provide data to client computers (10) for sharing a processing load of the system. The host computer and data management computer cooperatively function such that the management computer transfers data with client computers to provide virtual objects in accordance with data of the management computer. The property of such objects are dictated by the data transfer of host computer.[2] Thus, in operation, upon a request by a user at a client computer, the data management computer provides VRML files for describing a desired virtual space (V) from the network (NW). The file is interpreted at the client computer and the virtual space is created on a

[1] Morse at column 2, lines 15-21.
[2] Matsui, column 10, line 18 through column 11, line 21.

display of the client computer. An object table is generated at the client computer and the client computer notifies the host computer through the network that an object corresponding to the client computer has entered the virtual space. The host computer, upon receiving such notification, updates the corresponding virtual space area Table by adding a new object to the virtual space area Table showing the relation of each virtual space and objects existing in the virtual space.[3]

Finally, Falacara discloses a software (VRML) component hierarchical structure in which VRML software components are structured to define an appearance, composition and personality of an object. The component includes two additional aspects identified as "parts" and "attributes". The parts are logical names for elements within the geometrical model of the component. Attributes are used to store non-geometric information about the Abstract or physical properties of a component such as weight, maximum speed and aggressiveness.[4]

Conversely, the information processing system of claims 1-11 provides user terminals having movement interpretation nodes (112) which are configured to provide parameters for interpretation of the movement of an associated virtual living object based upon user input.[5] Based on the parameters, the movement interpretation node provides the parameters to the server via a network. The server includes an object management node (102) for determining at least some movements for each of the virtual living objects in the virtual community space based upon the interpretation nodes of each client PC. In this way, applicants' information processing system provides a distributed control of virtual living objects in a virtual community space. This is a novel aspect of the applicants' invention as it enables a dynamic editing of an action and structure of a virtual object which heretofore had been controlled by a service provider such as in the Matsui system.[6]

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[3] Matsui at column 11, line 31 through column 12, line 3.
[4] Falacara at column 7, lines 3-33.
[5] Application at Figure 8.
[6] Application at page 4, lines 11-13.

Simply stated, Matsui does not disclose a cooperative management node in accordance with claims 1-11, as it does not disclose or suggest a management node for cooperating with movement interpretation nodes of user terminals, but rather dictates virtual object control in the usual manner. Likewise, Falacara does not disclose or suggest movement interpretation nodes, but rather, a VRML software component structure.

As none of the references, either alone or in combination, disclose or suggest providing a management node configured to determine at least some movements for each virtual living object in a virtual living community space, based upon movement interpretation nodes of a user terminal, applicants' submit that claim 1 and any claim depending therefrom is patentably distinguishable over the cited references. Likewise, claims 3, 5, 7, 9 and 11 recite substantially the same limitations as discussed above and are allowable, including any claims depending therefrom, at least for the same reasons discussed above.

Accordingly, applicants respectfully request that the rejection of claims 1-11 under 35 U.S.C. § 103 be withdrawn.

Further, the present response sets forth new claims 12-19 for examination. New independent claim 12 is similar to independent claim 1 except that new independent claim 12 further recites "the parameters defining at least bones and joints of the associated virtual living object, limits of joint movement, and movement of the bones and joints". The other new claims 13-19 also recite the above-noted feature. That subject matter is fully supported by the original specification for example in the paragraph bridging pages 14 and 15.

With respect to the above-noted feature clarified in new independent claim 12, and with reference to Figure 1 in the present specification as an example, the movement interpretation node 112 provides parameters for interpretation of movement of an associated virtual living object 111. With respect to Figures 9 and 10 in the present specification as a non-limiting example, the parameters define at least bones and joints of the associated virtual

living object, limits of joint movement, and movement of the bones and joints. Such a feature is believed to even further distinguish over the applied art.

More particularly, none of the cited art to Morse, Matsui, or Falacara discloses or suggests any operation in which parameters set forth by a movement interpretation node define at least bones and joints of the associated virtual living object, limits of joint movement, and movements of the bones and joints.

In the outstanding rejection Falacara was cited to disclose a software (VRML) component hierarchical structure in which the VRML software components are structured to define an appearance, composition, and personality of an object. However, Falacara does not disclose or suggest any operation or suggestion in which parameters of "bones and joints of the associated virtual living object, limits of joint movement, and movement of the bones and joints" are set forth by a movement interpretation node.

In such ways, new claims 12-19 even further distinguish over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Bradley D. Lytle
Registration No. 40,073
Surinder Sachar
Registration No. 34,423
Attorneys of Record

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)
SNS:smi

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